



Safety & Mission Assurance News

Mission Success Starts With Safety

October 1999



An Introduction...

The Office of Safety and Mission Assurance (OSMA) is launching a newsletter that we hope you will find useful and informative. In this quarterly publication, we will

describe new safety and mission assurance activities and provide updates on the Agency Safety Initiative and ISO 9000. Regular features will include a list of websites worthy of attention and safety tips. We will also highlight opportunities for training and announce new web-based training courses available through the Site for Online Learning and Resources (SOLAR). In addition to hardcopy distribution, the OSMA newsletter will be available on our website at <http://www.hq.nasa.gov/qnews>. Don't forget to add this site to your bookmarks.

Our goal is to provide a publication that is useful to the entire NASA community. We welcome comments and suggestions on the features and format of the newsletter. Please email feedback to qnews@hq.nasa.gov.

--Frederick D. Gregory, Associate Administrator for
Safety and Mission Assurance.

NASA Meets Administrator's Goal for ISO 9000 Certification

On September 17, 1999, NASA became the first multi-site government agency in the world to achieve ISO 9001 certification at all its facilities.

John Lyver, the NASA ISO 9000 integration manager, says that cooperation among NASA Centers was key to NASA's success in attaining certification at all sites. Since there is minimal ISO 9001 experience within the high-tech sector of government, NASA was its own best resource. Centers shared their experiences in program and process management.

At Headquarters, the four Strategic Enterprises completed their ISO 9001 registration in May 1999. A

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Update: NASA's Agency Safety Initiative (ASI)

The ASI is an outgrowth of the Administrator's increased emphasis on safety within NASA. Simply put, NASA's goal is to become the Nation's leader in the safety and occupational health of our workforce and the safety of the products and services we provide. In the course of performing our mission, we will protect:

- The public
- Astronauts and pilots
- NASA workforce
- High-value equipment and property

NASA's current safety performance is better than the Federal Government's average- in fact, better than most of the goals established for the Federal Government. Even so, NASA must improve safety measures by up to a factor of 10 to match the best performers in the private sector. We strive for zero human injury mishaps.

Four basic themes, or Core Process Requirements (CPRs), are required for a successful safety and health program:

- Management commitment and employee involvement
- System and worksite hazard analysis
- Hazard prevention and control
- Safety and health training

The ASI affects every NASA employee. NASA Centers have begun local initiatives to ensure that fundamental safety and mission success requirements are communicated, understood, implemented, and are not compromised. Specific initiatives already completed or underway include:

- Incorporating Risk-Based Acquisition Management (RBAM) into the NASA FAR Supplement (page 3)
- Requiring formal risk management for NASA programs in NPG 7120.5A
- Achieving third party certification under OSHA's Voluntary Protection Program. Langley Research Center and Johnson Space Center have already received "Star" certification. The Administrator has stated that all NASA Centers will achieve third party certification in occupational health and safety.

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pre-assessment audit is scheduled in February 2000 to expand the ISO 9001 scope to include the Functional/Staff Offices. NASA Headquarters will be 100% ISO 9001-certified in May 2000. Ames Research Center is certified "gate to gate," and Kennedy Space Center and Marshall Space Flight Center are well on their way toward 100% certification.

The ISO 9001 coordinators from all NASA Centers and the Jet Propulsion Laboratory will meet in Hagerstown, MD, on November 1st. The coordinators will define how NASA can use ISO 9001 to its advantage now that all sites are registered. They will also review the draft 2000 update of the ISO 9001 documents, and discuss how NASA will convert to the new version of the standard in 2001. See <http://www.hq.nasa.gov/iso> for more information.

Supplier Assurance Contract Awarded

NASA awarded the Supplier Assurance Contract (SAC) to Dynacs Engineering Company, Incorporated, of Lanham, MD. The SAC provides safety and mission assurance oversight and insight of prime and subcontractors throughout the continental United States. The SAC is an alternative to SMA contractor oversight and insight services provided by the Defense Contract Management Command (DCMC).

The SAC is a small business set-aside, performance-based, indefinite delivery indefinite quantity (IDIQ), cost-plus-incentive-fee (CPIF), single-award contract. Goddard Space Flight Center/Code 300 manages the contract, but services may be provided to any Center's program.

If you are interested in utilizing the SAC, contact GSFC/303/John Maristch at jmaristc@pop300.gsfc.nasa.gov or on (301) 286-9900.

- Conducting a Performance Evaluation Profile to baseline safety attitudes and knowledge- see <http://www.hq.nasa.gov/safety> and click on "PEP" for your Center's status and plans.

More information on the ASI can be found at: <http://www.hq.nasa.gov/safety>.



Rutledge Named Division Director

Dr. Peter J. Rutledge is the new Director of the Enterprise Safety and Mission Assurance Division (QE) in the Office of Safety and Mission Assurance.

Since joining NASA in October 1988, Dr. Rutledge's work at NASA Headquarters has included trend analysis, information systems, strategic planning, risk assessment, risk management, and mishap investigation. From April 1996 to March 1997, Dr. Rutledge led the Space Flight Safety and Mission Assurance Division (QP).

Prior to joining NASA, Dr. Rutledge was Deputy Director for Occupational Safety and Health Policy in the Office of the Secretary of Defense. Previously, he had served as Technical Advisor to the Director of Army Safety and as Chief, Engineering Branch, Safety Office, Army Materiel Command (AMC) Headquarters.

Dr. Rutledge earned a Bachelor of Science in Mechanical Engineering from Rutgers University, a Master of Engineering in Industrial Engineering from Texas A&M, and a Master of Science and a Doctorate in Reliability Engineering from the University of Maryland.

Safety Tip: Carbon Monoxide

Carbon monoxide is a colorless, odorless, toxic gas produced by the incomplete combustion of solid, liquid, and gaseous fuels. Appliances fueled with gas, oil, kerosene, or wood may produce CO.

Breathing CO causes symptoms such as headaches, dizziness, weakness, sleepiness, nausea, vomiting, confusion, and disorientation. At very high levels, it causes loss of consciousness and death.

To reduce the risk of carbon monoxide poisoning in

your home, have the heating equipment checked each year before the heating season. Check chimneys and flues for blockages, corrosion, and loose connections. Consider installing a carbon monoxide detector.

If you suspect there is carbon monoxide in your home:

- Open all windows and doors
- Call the fire department for an emergency inspection
- Seek immediate medical attention if carbon monoxide is detected.

NASA FAR Supplement Will Incorporate Risk-Based Acquisition Management

NASA spends about 90 percent of its annual budget buying supplies and services. Unforeseen events in the acquisition and project execution cycle, such as mishaps, contractor performance problems, funding shortfalls, technological obstacles, and schedule incompatibilities can endanger human life, jeopardize program success, and reduce the public's confidence in the Agency.

One effort to counter these potential problems is the Risk-Based Acquisition Management initiative (RBAM). RBAM seeks to integrate risk and safety principles throughout the entire acquisition process by purposefully considering the implications of programmatic risk when developing the acquisition strategy, selecting sources, choosing contract type, structuring fee incentives, and conducting contractor surveillance. RBAM will reduce the incidence and severity of unforeseen programmatic events by making risk management a core acquisition concern. RBAM will be implemented by embedding the principles of risk management and safety into the NASA FAR Supplement and training the acquisition community.

The draft rule for incorporating RBAM into the NASA FAR Supplement was published in the July 20, 1999, issue (Vol 64, #138) of the Federal Register, on pages 38880-38884. You can also find the draft rule on: <http://www.hq.nasa.gov/office/codeq/risk/rbam.htm>

The draft rule will require the following:

- Acquisition teams will include representatives from SMA, environmental protection, occupational health, information technology, export control, and security.
- Acquisition plans will consider appropriate issues in these areas, including risks, performance incentives, surveillance, and adequacy of resources.
- A Risk Management plan will be required.
- Where appropriate, Mission Suitability consideration shall include safety, occupational health, and mission success.
- Offeror's relevant past performance in occupational health, security, environmental protection, safety, and mission success will be evaluated.
- Risk assessments will be performed in determining the offeror's mission suitability.

- The technical factor for award fee determination must include consideration of risk management.
- A major breach of safety or security may result in zero award fee determination for the applicable period, and a commensurate reduction in the award fee pool.

A separate NASA FAR Supplement revision will incorporate risk management into fee and profit negotiation objectives. Training for procurement personnel is planned for 2000.

For more information on RBAM, contact Kenneth A. Sateriale at kenneth.sateriale@hq.nasa.gov or on (202) 358-0491; or Dr. Peter J. Rutledge at prutledg@hq.nasa.gov or on (202) 358-0579.

1999 QASAR Awards

-Geoffrey Templeton

The call for nominations for the 1999 QASAR (Quality Assurance and Safety Achievement Recognition) Awards will be announced in late October. The QASAR Award recognizes NASA, other Government, and prime/subcontractor associates for significant quality improvement to products or services for NASA, or for safety initiatives within products, programs, processes, and management activities. Each Headquarters Strategic Enterprise and Functional/Staff Office as well as each Center will be asked to nominate one individual in each of the four QASAR Award categories. The four Award categories are:

1. Most significant safety or mission assurance (SMA) contribution from within the NASA SMA organization.
2. Most significant safety or quality improvement, service improvement, or initiative from a NASA employee external to the SMA organization.
3. Most significant safety or quality product improvement, service improvement, or initiative from a Government (non-NASA) employee.
4. Most significant safety or quality product improvement, service improvement, or initiative from a NASA prime or subcontractor employee.

From among the Headquarters and Center nominations, four "Best of the Best" QASAR Award winners will be selected, one in each category. The selection board is chaired by the Deputy Associate

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George M. Low Award Program

-Geoffrey Templeton

The George M. Low (GML) Award is the premier quality and performance award in the aerospace industry, and the senior National award for organizational quality and productivity. Up to four GML Awards are presented annually to outstanding large and small NASA contractors and subcontractors for exemplary products or services given to the Agency. Since 1985, 252 contractors have participated in the evaluation process, and 25 companies have been selected as Award recipients.

Each Fall, the Centers nominate candidates for the Award. The nominations are screened by the Strategic Enterprise GML Award Review Council, composed of Center and Headquarters representatives, and up to 12 Award semi-finalists are forwarded to the GML Validation Board. The Validation Board evaluates the semi-finalists and selects up to eight finalists for a site visit. Following the site visit, the Validation Board recommends winners to the GML Panel of Judges. The Panel of Judges consisting of the four Strategic Enterprise Associate Administrators and the Associate Administrator for Safety and Mission Assurance selects the four winners. The Award winners are referred to the Administrator who presents the GML Awards at the annual NASA Continual Improvement and Reinvention Conference.

The 2000 GML Award cycle started in September. The Strategic Enterprise GML Award Review Council will meet in October at KSC. Between December 1999 and March 2000, finalists will be selected, visited, and recommended to the GML Award Panel of Judges. The Administrator will present the 2000 GML Awards on April 27, 2000.

See <http://www.hq.nasa.gov/gml> for more information.

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Administrator for SMA and is comprised of the 10 Center SMA Directors. (For Award purposes, JPL is considered as a NASA Center.) All nominations must be received by the Office of Safety and Mission Assurance by January 10, 2000.

QASAR Awards will be presented by the Administrator at the 15th Annual NASA Continual Improvement and Reinvention Conference on April 27, 2000. In addition, NASA civil servants will receive a substantial cash award, if their achievement made a significant contribution to NASA's safety program. See <http://www.hq.nasa.gov/qasar> for more information.

L&M Technologies Selected as OSMA Support Contractor

In April 1999, OSMA selected L&M Technologies, Inc., to provide safety, reliability, maintainability, and quality assurance support. The L&M contract is the first technical indefinite delivery, indefinite quantity, performance-based contract to be awarded at NASA Headquarters. It is a two-year contract, with three one-year options.

L&M is a small disadvantaged business with over 26 years of experience in Federal contracts. Headquartered in Albuquerque, NM, L&M is the first small business to win New Mexico's highest quality award, the Zia Award, which is based on the Malcolm Baldrige National Quality Award criteria. Two subcontractors, AlliedSignal and Management IQ, round out the contract team.

Kathleen Harer serves as the Program Manager for the contract. She retired from Kennedy Space Center in January 1998, and brings a broad range of safety and management experience to the support of OSMA.

Site for On-Line Learning and Resources

SOLAR has over 70 Web-based SMA training courses, and courses in Occupational Health, Procurement, Financial & Resources Management, IT Security, and Ethics. Take courses at your computer at your own pace and schedule. See <http://solar.msfc.nasa.gov>.
Lessons Learned Information System
LLIS captures knowledge that NASA has learned the hard way. Search the database to see if there are any engineering or management lessons applicable to your project or facility. See <http://llis.nasa.gov/>

NASA Safety Reporting System

NSRS is a mechanism for *confidential* reporting of unresolved safety problems. See <http://www.hq.nasa.gov/nsrs>, contact the NSRS Project Manager at (703) 237-8083, or write to:

NSRS Project Manager
NASA Safety Reporting System
P.O. Box 6037
Falls Church, VA 22040-9824

In October, HQ will have an NSRS display in the west lobby and NSRS Planning Guides will be distributed to all Centers.